REMARKS

Claims 12, 13, and 37-40 are currently pending in the application. No amendments are currently being made to the application. The foregoing separate sheets marked as "Listing of Claims" shows all the claims in the application, with an indication of the current status of each.

Claim Rejections: 35 USC § 112, first paragraph

Claims 1,12-13, 16-17 and 33-38 stand rejected under 35 USC § 112, first paragraph, due to a purported failure to comply with the written description requirement. This rejection is traversed.

Applicant submits that the information provided in the specification as filed was completely adequate to resonably convey to one of skill in the art that Applicant was in possession of the invention at the time the application was filed. The application as filed provided several points of identifying the "67 kDa laminin receptor" protein. Paragraph [0002] of the published application states:

"67 kDa laminin receptor (hereinafter it may be referred to as "67LR") is a protein of 67 kDa, which is derived from a 37 kDa precursor protein translated from mRNA that codes for 295 amino acids, through intracellular acylation polymerization of the precursor protein by a fatty acid for homo-dimerization or hetero-dimerization thereof; and only when it moves onto the surface of a cell membrane together with integlins, it functions as a laminin receptor (Biochemistry, 1995, 34: 11276-11287, T. H. Landowski et al.; J. Cell. Biochem., 1998, 69: 244-251, S. Buto et al.)."

In addition, as noted by Examiner, paragraph [106] of the published application states:

"67LR used in the present invention itself is a known protein, and, for example, based on GenBank Accession No. NM-002295 registered cDNA sequence, cDNA of 67LR can be readily obtained according to an ordinary process by using the PCR with a template of various libraries to sandwich the sequence which encoding the present protein therebetween. The cDNA thus obtained may be inserted into various commercially-available vectors in the form that enables protein expression, whereby it is easy to construct a cell line capable of expressing the present protein and to obtain the present protein itself. Apart from it, there are some reports relating to cDNA production and protein expression (Proc. Natl. Acad. Sci. U.S.A., 1988, 85: 6394, H. You,

et al.; British Journal of Cancer, 1999, 80: 1115-1122, K. Satoh, et al.; Biochemistry, 1995, 34: 11276-11287, T. H. Landowski, et al.)."

Firstly, the specification as filed, provided a standard reference to the GenBank Accession No. of the protein (NM_002295). Within minutes of querying the GenBank database with this number, Applicant retrieved the enclosed printout (Exhibit A) which contained the protein sequence of the 67 kDa laminin receptor. In addition, the "variant 1" gene sequence encoding the protein was provided; a second variant results from differential splicing of the gene. However, as stated in the text of pages 3 and 4 of the printout, both variants encode the same protein. There is only one protein sequence provided for GenBank Accession No. NM_002295.

The Examiner states that "the sequence of a particular Genbank accession number is alterable from the original submission". However, Applicant notes that the sequence of the well-known 67 kDa laminin receptor has been known for some time (at least a decade) and has not been altered since its discovery, regardless of whether the sequence is obtained from GenBank or elsewhere. Applicant refers Examiner to the enclosed articles: Ardini et al. discuss the evolutionary relationships between the sequence encoding the 67 kDa laminin receptor and related sequences (see Table 1 and Figure 1, where the *Homo sapiens* protein sequence is first in the list). At the time of publication of Ardini et al. (1998) it was already well-known that the 67 kDa laminin receptor was encoded by a gene coding for a 32 kDa product (see paragraph 2 of the Introduction and the ensuing description). Dimerization of the 32 kDa product was established in 1995 by Landowsi et al, (copy enclosed), where knowledge of the full-length nucleotide and protein sequences were taken for granted as known (see the third paragraph of page 11276). Buto et al. (1998) provided description of the full-length cDNA encoding a 32-kDa polypeptide by referencing Grosso et al., 1991, Rao et al., 1989 and Yow et al., 1988. Narumi et al. (1999) discusses work conducted with a 20-mer peptide which "corresponds to a partial amino acid sequence of human 67LR" (first paragraph of Materials and Methods) and references a 1987 paper to Wewer (reference #3) and Castronovo et al., (see reference #15 entitled" Functional domains of the 67kDa laminin receptor precursor"). Shi et al., 2002, discusses the discovery that a gene encoding MGr1-Ag shares the same coding sequence as that of the known 37kDa precursor of 67 kDa laminin receptor (see abstract and the last sentence of the introduction). A discussion of the precursor sequence appears at lines 18-22 of column 1 on page 1580. Applicant

draws Examiner's attention to the Materials and Methods sections of each of these papers, which unequivocally shows the ready availability of both the nucleotide and amino acid sequences of the 67 kDa laminin receptor, from a variety of sources.

Applicant has provided these references, which, other than Marumi et al. and Ardini et al, were listed in paragraph [0002] of the application as published, in order to establish that the protein sequence of the 67 kDa laminin receptor has been known and readily accessible to those of skill in the art for at least a decade. Applicant notes that the GenBank Accession No. and the references disclosing the sequence of the 67 kDa laminin receptor were available at the time of filing the application, and were described in the specification as filed. The application as filed clearly identifies the protein, so that one of skill in the art would be able to unambiguously identify which protein was to be used in the practice of the invention. There is only one 67 kDa laminin receptor and reports of its sequence have been consistent for years, as shown in by the enclosed articles. Thus, contrary to Examiner's assertion, one of skill in the art would assume that Applicant was in possession of the invention at the time the application was filed. There can be no doubt concerning which protein sequence is to be used in the practice of the invention, and access to the sequence is, and was at the time of filing, readily available to those of skill in the art, e.g. a scientist or medical researcher with access to the computerized GenBank or other protein database, and/or to the journal articles referenced in the application as filed as a guide.

In view of the foregoing, Applicant respectfully requests reconsideration of claims 12 and 13 in their present form and withdrawal of this rejection.

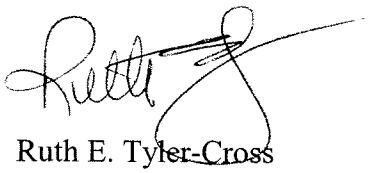
Concluding Remarks

In view of the foregoing, it is requested that the application be reconsidered, that claims 12, 13, and 37-40 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at 703-787-9400 (fax: 703-787-7557; email: ruth@wcc-ip.com) to discuss any other changes deemed necessary in a telephonic or personal interview.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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